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ABSTRACT

This inservice package for teachers provides a rationale for using blocks to enrich the young child's classroom environment and suggests numerous ways blocks can be used to encourage the physical, intellectual, social and emotional development of young children. A brief delineation of the developmental aspects of the block play stages through which a child passes is followed by a discussion of the adaptability and creative potential of block building. Ways in which block play lends itself to physical activity, providing a background for mathematical and scientific concepts and the social development of young children are described. Criteria for the selection of blocks, information on various types of blocks and basic accessories for the block area are listed. Guidelines for purchasing blocks, comments on the importance of having sufficient blocks and adequate work space and shelving, and suggestions on how to arrange to have blocks constructed inexpensively are included. The role of the teacher in encouraging the children's development in the block area is emphasized. (CM)

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BLOCKS:

Essential Equipment For Young Children

A Self Instructing Learning Package

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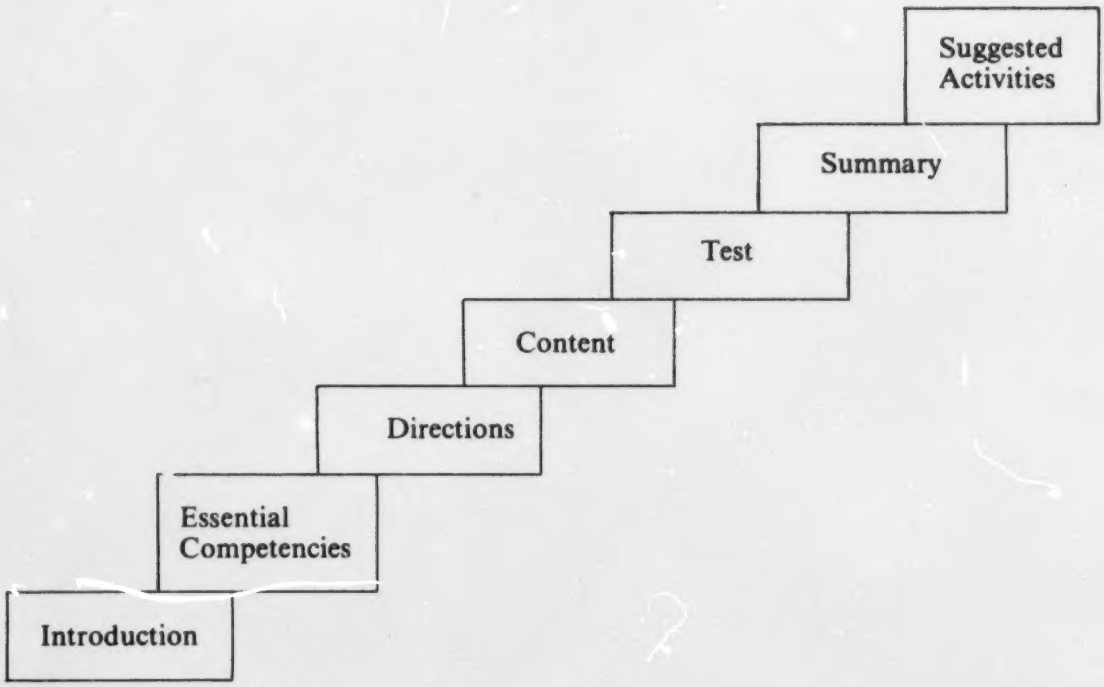
Rationale

Blocks are some of the most important types of equipment found in an environment designed for young children. They can be used in numerous ways to provide opportunities for growth and development. Blocks encourage physical, intellectual, social and emotional growth. Far too many educators overlook the significance of the values of blocks. Teachers, not acquainted with the opportunities that blocks provide, arrange for too few experiences and too little space, materials and time for adequate involvement. Administrators also find it difficult to see the value in the purchase of such expensive materials. They often ignore the fact that blocks can enrich child development. Educators having questions of the cost of blocks should keep in mind their durability. Wooden blocks will literally last a lifetime.

Gestalt of Package

Blocks: Essential Equipment for Young Children



Essential Competencies

1. The participant will know the importance of blocks as a material for development of the young child.

2. The participant will understand the importance of the teacher role in the selection and utilization of blocks.

3. The participant will apply the principles discussed throughout the context of this inservice package in selecting blocks and accessories in a classroom for young children.

Directions

- Read the content of the inservice package.
- Complete the questions from the test.
- Check the test responses by referring to the sections dealing with each question.
- If the test score is not 98%, review the package again.
- If the test score was above 98%, read the summary and do one of the suggested activities.

Developmental Aspects

Blocks can be used in many different ways. The use depends upon the child designing and building the structure. In child growth and development, there are several block-play stages through which a child passes:

1. Blocks are aimlessly carried from place to place, but they are not apt to be used in any type of construction.

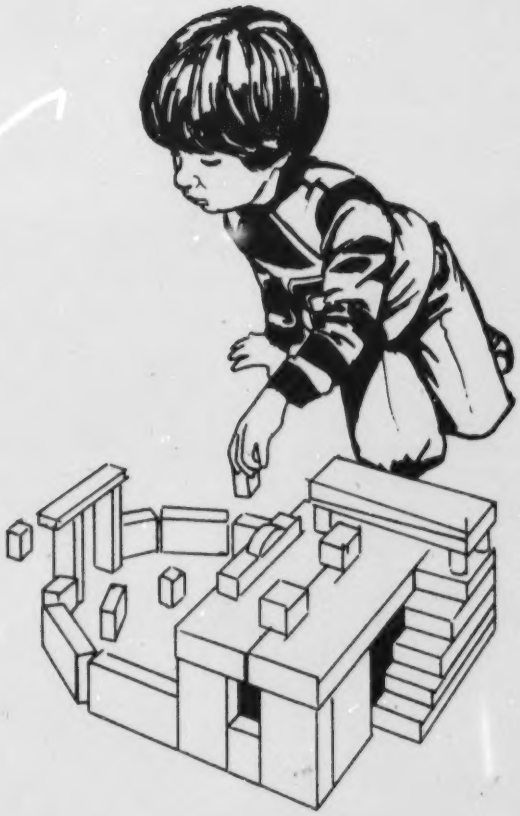
2. Block building begins on a limited basis. Children are found designing very simple structures of horizontal patterns and vertical stackings. During this stage, there is a great deal of repetition.

3. The child usually begins bridging two blocks with a third block.

4. Children arrange blocks in a way that they enclose a particular area.

5. The child begins to design decorative patterns and symmetry is observed. Buildings are constructed but not yet named.

6. Children are in the stage of constructing buildings and naming them. The naming of the structure is important, but many times the name is not in direct relationship to the function of the structure. Creative dramatizations are beginning to appear.



7. Children begin to produce forms that are familiar to them. They may build a replica or a symbolization. There is a great deal of dramatic play at this time.

Creativity

Since blocks are an adaptable material, they can be creatively challenging as well. With a supply of blocks and an area in which to work, children will construct an endless variety of patterns ranging from very simple forms to elaborate and complex patterns. Children will experiment with designing patterns and creating style designs and arrangements which are expressions of individual creative endeavors. Block building is an expressive art. Originality is found in the form and construction and the variety and uses of shapes, along with the language expression which the activity of building promotes. As children work together, compare ideas and engage in dramatic play, language is also developed. Dramatic play, a creative endeavor, is generated through block building.

Physical Activity

The execution of any structure in the block building area will involve physical exercise. It is imperative that children use their muscles to make their abstract ideas into tangible objects. Blocks can play an important role in the development of physical characteristics of young children. After a child spends part of the day in the block building area, he has had a variety of physical exercise, including bending, stretching, carrying, lifting, straightening, balancing and coordinating muscles.

Mathematical Concepts

Blocks are a vital tool for providing the necessary background for mathematical concepts. Children will experience quantity when they ask, "How many?"

The related shapes of the blocks introduce additional mathematical concepts. Children will be able to feel exactly how a square, rectangle and cylinder are shaped. It is important that the teacher use the correct names for each of the blocks so the children will learn the correct names and learn the shapes.

When construction begins, children will be dealing with a variety of new concepts. They will gain a clearer picture of four sides when constructing a rectangular enclosure, although they may not know the term rectangle or enclosure.

Size comparisons are concepts that are also promoted by blocks. Working with such multiples as the unit, half unit, double unit, etc., children will be matching and comparing sizes.

They also develop counting skills by determining how many blocks belong in a certain place. Children will count aloud to figure how many will be needed.

There are limitless possibilities of the field of mathematical concepts. Since the child is manipulating on his own, he creates his own individual mathematical concepts. An alert teacher will capitalize upon each new need for some numerical concept.

Science

Science experiences happen everyday through blocks. The basic shapes of the material are evidence of "rest" and "motion." The flat surfaces remain still while the rounded cylinders roll. Ramps and inclined planes are simple machines. They assist in the movement from one level to another. Adding a string to the available equipment may assist in making more complicated machinery. Gravity becomes a real concept when blocks fall.

Social Aspects

Blocks play an important part in the social development of young children. Children are brought together with a common interest to share, communicate, solve, calculate and organize together. Therefore, blocks permit children to gain interest in building with others in larger group projects.

Cooperative play is the product of a series of experiences in working with others. Children must be permitted the opportunity to work together, problem-solve and communicate. Where is a better place for these experiences than in the block area of a classroom, with such fine materials?

With young children, cooperative play becomes a normal activity. This is when blocks will be used over and over again. Children will get together in small groups or with another individual and plan, construct and play together. Working together in the block area will assist in the development of a longer attention span, interest in peer relationships and a greater ability to plan and stay with a plan of work. All of these factors contribute to children working on longer and larger projects in the block area. Many times, those who are not engaged in the construction will want to use the structure as a prop in dramatic play.

Part of the social development leading to the cooperative activity is the growth of responsibility in and to the group. Living in a group presents a need to share and take turns with both ideas and materials. It involves doing one's part in keeping materials in order, respecting the rights and properties of others and being careful that plans contribute to the well being of those concerned. Opportunities for developing such responsibilities stem from the working relationships in the block area, in real situations. Tangible problems relating to sharing toys and blocks and taking turns with such materials can be recurring but satisfactorily solved by individual children, or by the group, with teacher guidance. Sharing ideas, plans and work promotes cooperative effort and can, with skillful teacher guidance, be encouraged and developed with young children.

Blocks require careful, considerate use. They are materials that must be carried carefully so as not to injure another person. They must be placed carefully during construction so that buildings are steady and firm. Children must watch where they are going and consider others who have spent time and effort on a construction. When problems arise in the block area, children have the opportunity to discuss them and can be helped to formulate their own rules and mode of behavior. When children are invited to make the rules and regulations for each area, their meaning and purpose is far more effective than teacher directives.

Criteria for the Selection of Blocks

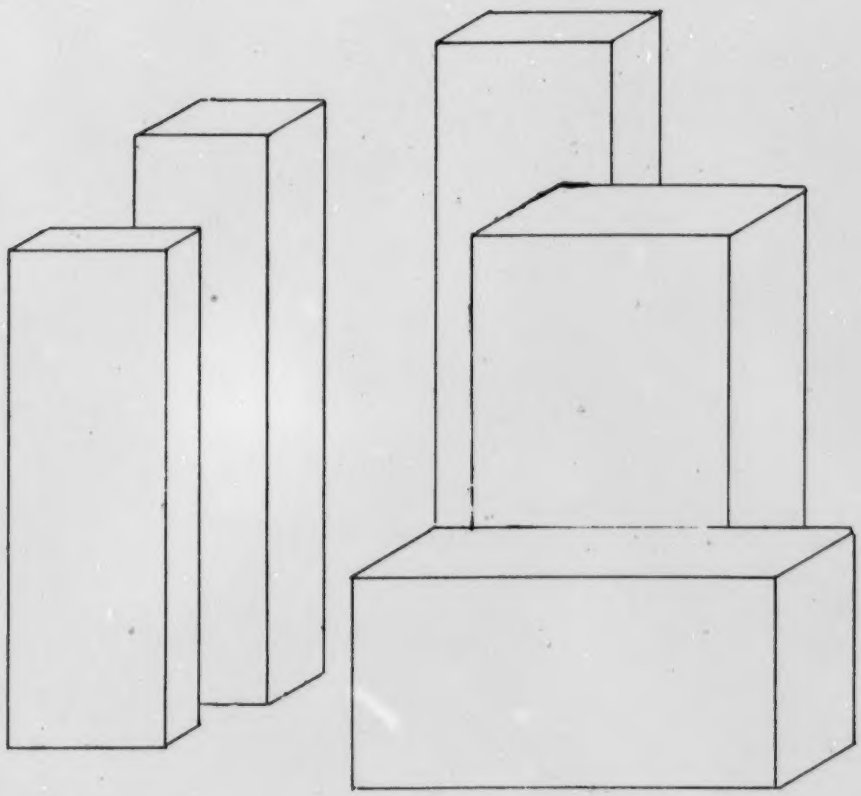
1. Is the set of blocks free of splintery edges, sharp corners, nail points and other dangerous protrusions?
2. Are the blocks sturdy enough to withstand a great deal of use?
3. Is there a large variety of shapes and sizes?
4. Is the paint or lacquer nontoxic?
5. Are the corners nailed, glued and carefully constructed, and do they fit well together?
6. Does the set encourage manipulation, curiosity and creativity?
7. Are the edges rounded and sanded?
8. Are the wooden blocks weather resistant?
9. Do the shapes relate to each other?
10. Are the cardboard blocks strong enough to stand on?

Types of Blocks

There are all sorts of blocks on the market. They range in size and variety of shapes, materials they are made from and in quality of construction. Some are made with cleated ends, some with hand grips, some designed to be held firmly with rods or bolts. Some are made of heavy cardboard and some of wood.

Hollow Wooden Blocks

The size of these blocks permits children to climb onto them. They are made of a sturdy hardwood with a finish which can withstand indoor and outdoor use. Blocks are chosen in multiples of each other so that they fit together accurately. Additional pieces, such as boards and ramps and a variety of shapes should be provided. These are of major importance for young children and are, therefore, effective to utilize in creative dramatizations.



Hollow Cardboard Blocks

These blocks, many times, serve as an inexpensive substitute for the hollow wooden blocks. They are shoebox in size and are stronger than appearance indicates. At least five dozen of these blocks will serve a classroom of 20 children for several years. These blocks are used only for indoor construction.

Unit Blocks

These blocks are made of solid hardwoods in carefully engineered multiples. They involve the child as the manipulator of a scene. The child moves figures, cars and animals throughout the construction. Each classroom should be equipped with at least 600 blocks for a group of 20 children.

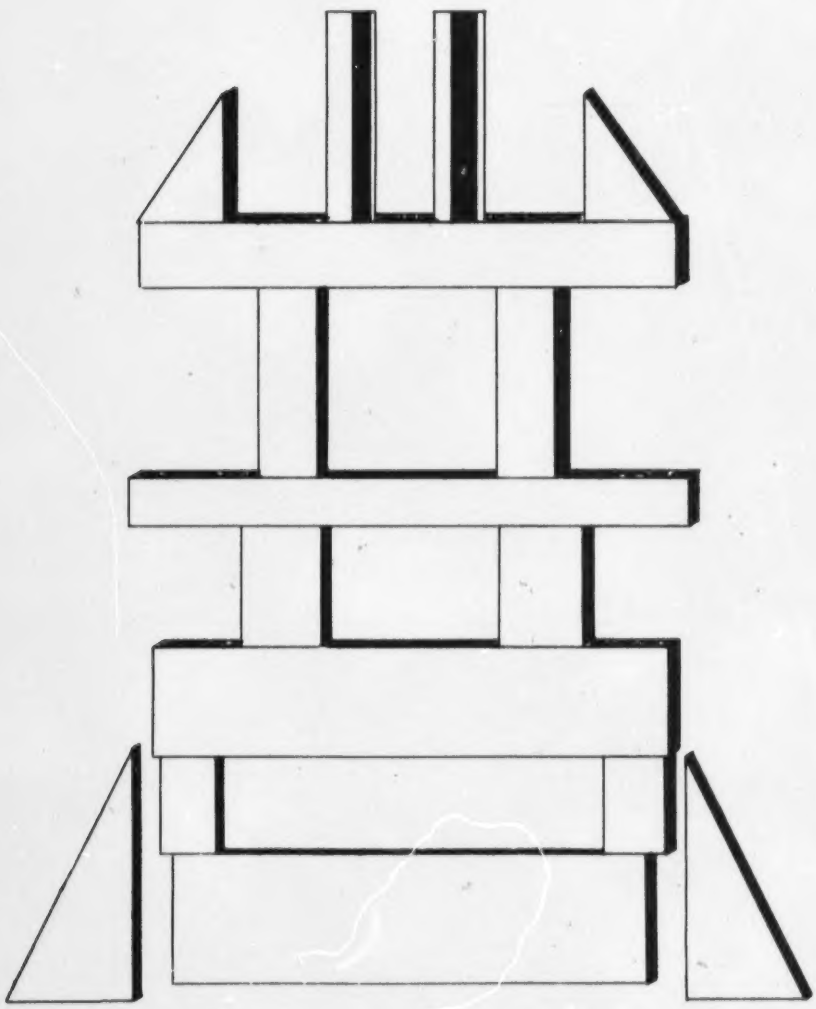
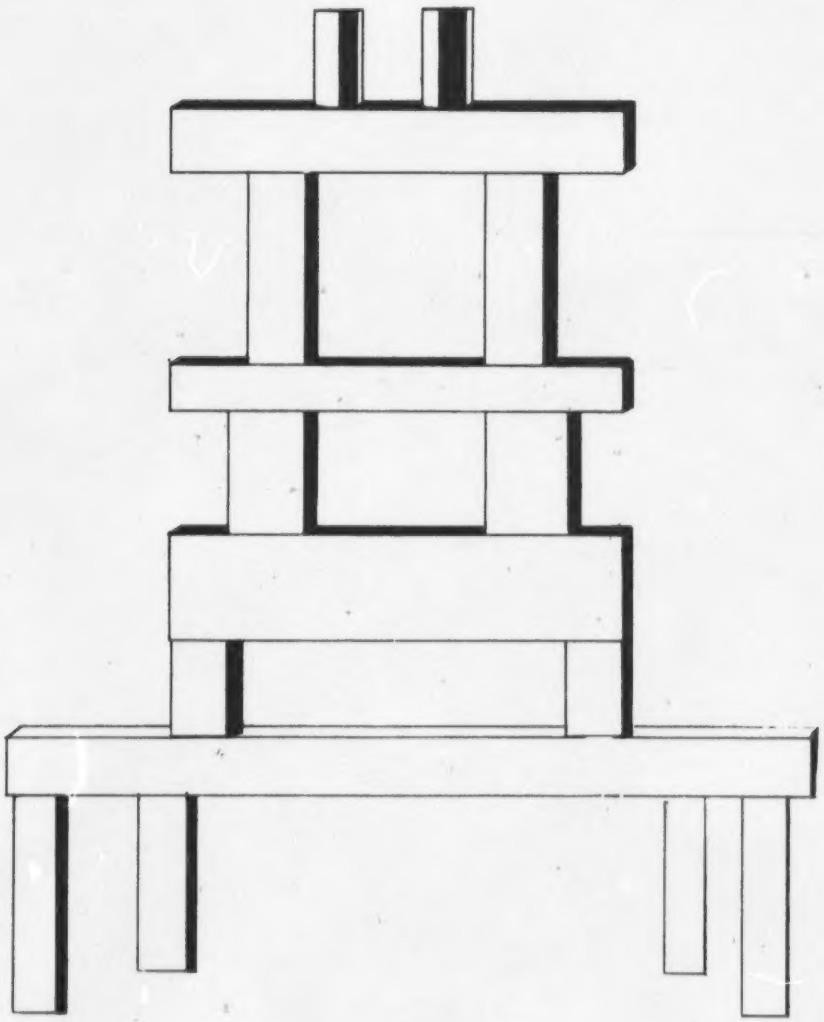


Table Blocks Or Colored Cubes

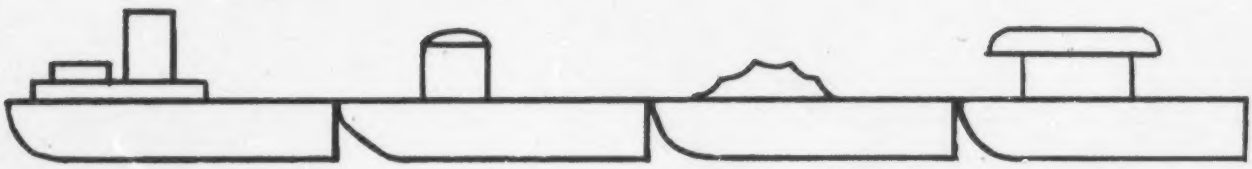
Table blocks or colored cubes are used for small construction purposes and counting activities. They are usually very colorful. Though they are sometimes too small for little hands to use, children enjoy decorating with them. These are very easily stored on shelves.



Accessories

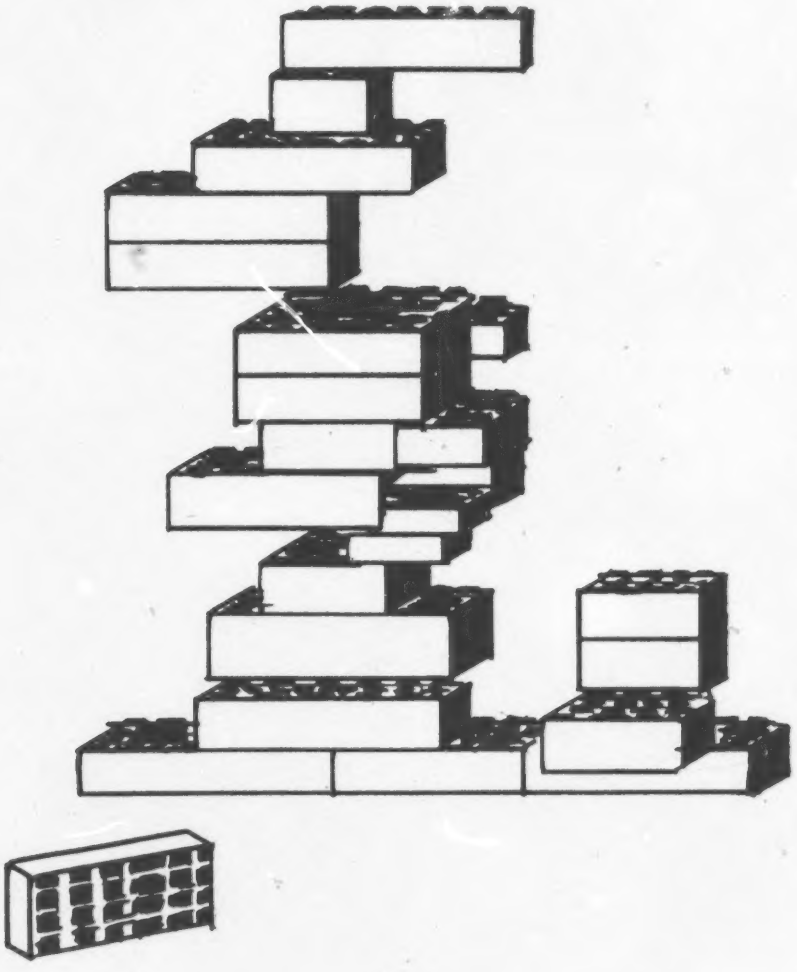
Block materials are excellent agents to stimulate growth and development. However, as children mature, blocks alone are not sufficient and should be supplemented with other materials. Because children are engaged in such a creative venture, at times they will need supplementary materials to enhance the creative dramatics.

Basic accessories for the block area are transportation toys, people figures, animal figures and a few boxes of colored cubes, which can be used for decorative and symbolic purposes. The teacher should be sure there are enough accessories for the size of the group working in the block corner.



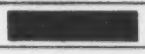
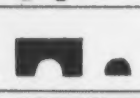
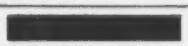
Miscellaneous Assortments

In addition to the blocks already mentioned, there are many more types. Teachers may wish to purchase additional materials which catalogue companies label as "blocks." It is suggested that these materials be supplementary in nature to those discussed in this booklet. It is of great importance to have the large blocks and unit blocks first.



Suggested Quantities

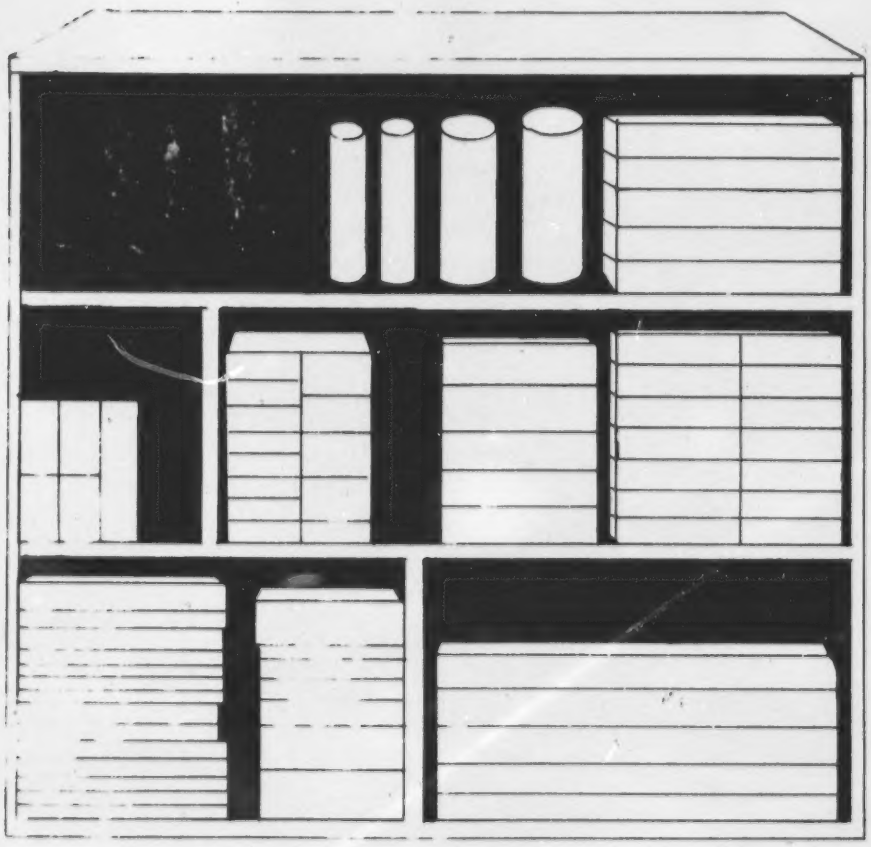
For a group of 15 to 20 young children, it is suggested that teachers consider the following quantities when purchasing blocks:

Shape	Name	Suggested Amount
	Square	80
	Unit	192
	Double Unit	96
	Quadruple Unit	32
	Pillar	48
	Half Pillar	48
	Small Triangle	48
	Large Triangle	48
	Small Column	32
	Large Column	16
	Ramp	32
	Ellipse	8
	Curve	16
	1/4 Circle	8
	Large Switch & Gothic Door	4 4
	Small Switch	4
	Large Buttress	4
	1/2 Arch & Small Buttress	4 4
	Arch & 1/2	4 4
	Roofboard	24
	Number of Shapes	23
	Number of Pieces	760

Important Considerations:

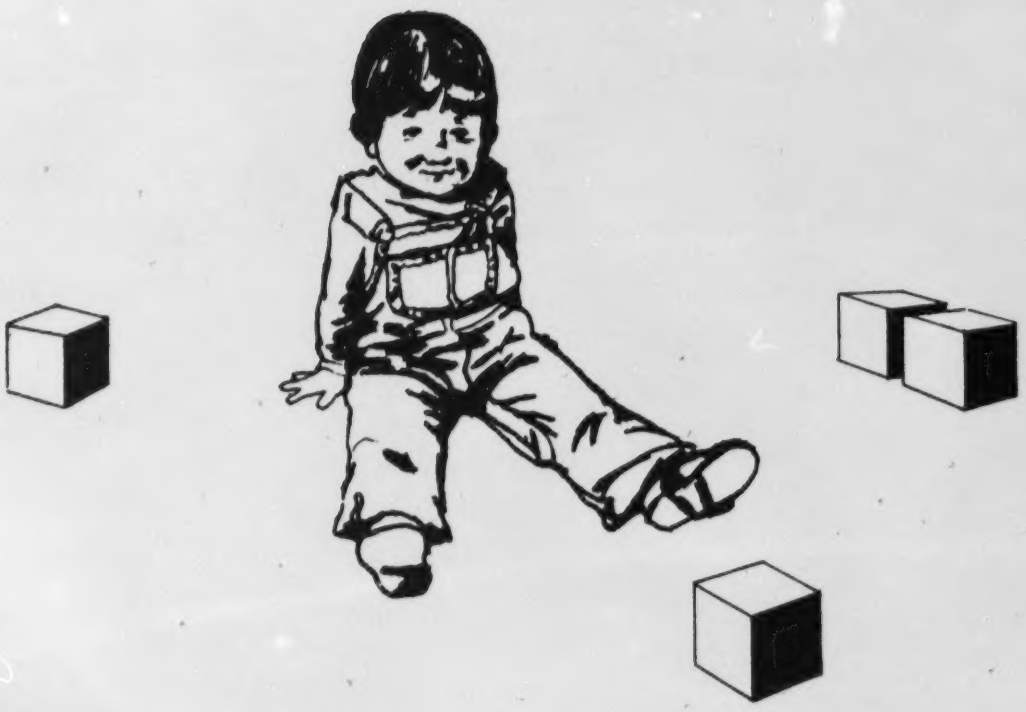
Importance of Sufficient Blocks

Of upmost importance in the area of block building is a sufficient amount of blocks. Each classroom of 20 children should be supplied with approximately 700 to 1,000 unit blocks with 20 to 25 varying shapes.



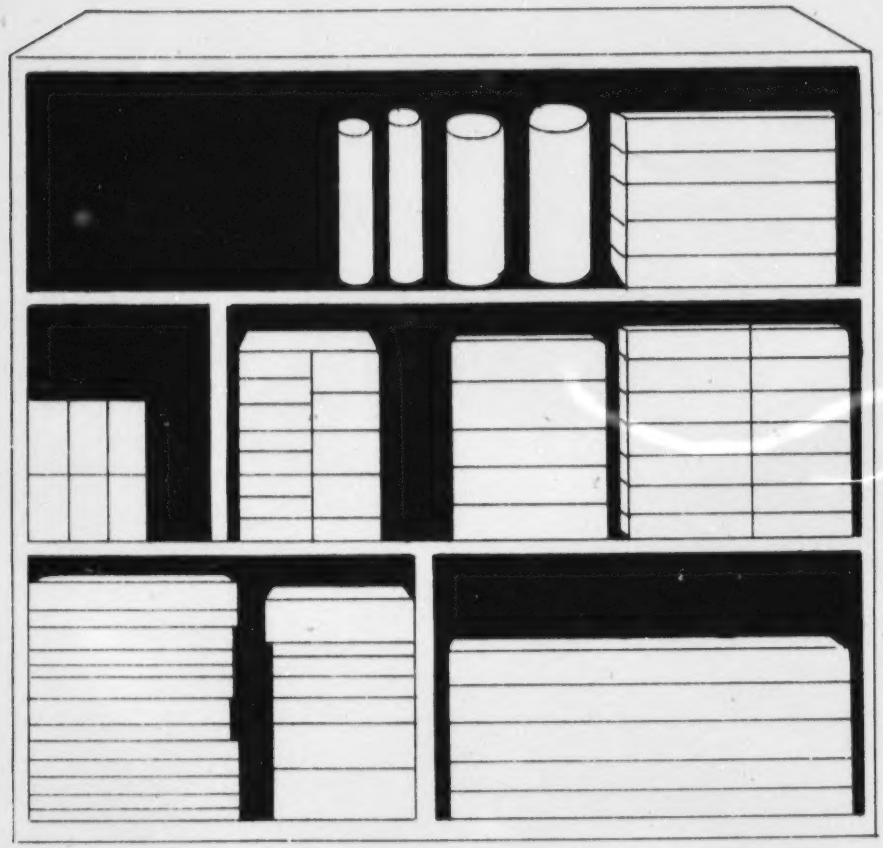
Adequate Work Space

A large enough building space to properly use the blocks is essential. Without enough space to properly construct designs, the children will become so limited and frustrated that they will not be able to gain maximum use from the materials.



Adequate Shelving

Enough shelving with the proper depth should be available to keep the blocks in an orderly arrangement. Blocks should be placed properly by type so that children can note the significance of the shapes and can enjoy putting them back into their proper places. The teacher has the responsibility of keeping the blocks clean and dusted periodically.



Limited Budget

On limited budgets, teachers cannot always justify the appropriation of money for blocks. That is not to indicate that the serious business of block building in the classroom should be eliminated. Blocks can be very easily contructed in a custodian's workshop, or in parent workshops. Many times, vocational education students will be able to make these bits of equipment as a class project. Many of these materials can be collected from natural surroundings or salvaged from various factories, lumberyards, supermarkets and hardware stores.

The Teacher

The teacher plays an integral part in the children's total development in the block center. She must set the stage by providing the materials, adequate and appropriate space, adequate time and her own sympathetic interest and concern.

She should see potential problems developing and assist in the remediation of those problems. She should have the children assist in the establishment of the rules and regulations of this area.

The teacher must watch and listen to the children. Through the use of these materials she can learn a great deal about the children. Often times, the children act out frustrations at this area, thus enabling the teacher to better understand the child. She can also learn about their needs, interests, abilities and development of concepts, which all should result in a more effective development of lessons and programs for the children. The teacher also has the responsibility of assisting the children in developing standards of behavior, assuming greater responsibility and growing in cooperative planning and living.

Test

1. Why do educators frequently decide not to purchase blocks for the classroom?
2. Discuss several stages the child will pass through when using blocks.
3. Why are blocks considered a creative material?
4. Discuss blocks in relationship to the physical development of the child.
5. What skills can the child master in mathematics through the use of blocks?
6. Discuss the social and emotional development of a child through the use of block materials.
7. Discuss the types of blocks.
8. List and discuss several important considerations in arranging for a block area in the classroom.
9. What suggestions can a teacher be given if she has no money budgeted for blocks?
10. Why is the teachers role so important in the selection and use of blocks for children?

Summary

Far too often educators underestimate the importance of the purchase of block materials and accessories for an early childhood classroom. They need to consider all of the important aspects of child growth and development, rather than the cost involved in the selection and purchase of the materials. Blocks are supplementary materials which assist in the growth of children, as demonstrated by the varying stages a child goes through when using such materials. Children are exposed to a great deal of learning through block building and should be encouraged to utilize the materials to stimulate and supplement such learning. Teachers play a significant role in the stimulation of such learning and should be encouraged to make this part of the classroom a focal spot.

Suggested Activities

1. Observe several children in an early childhood classroom. Note the varying stages of development as they pertain to block building.

2. Take slides of the children in an early childhood classroom as they are working with blocks. Put together a cassette tape discussing the physical, intellectual, social and emotional aspects of development which coincide with the slides.

3. Arrange a workshop for parents in discussing and presenting all the important facts you have learned about block materials.